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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,004	04/17/2006	Kris Filip Thielemans	PH0375	8918
36335	7590	06/19/2009	EXAMINER	
GE HEALTHCARE, INC.			BITAR, NANCY	
IP DEPARTMENT 101 CARNEGIE CENTER				
PRINCETON, NJ 08540-6231				
			ART UNIT	PAPER NUMBER
			2624	
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			06/19/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,004	Applicant(s) THIELEMANS, KRIS FILIP	
	Examiner NANCY BITAR	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 7-9, filed 4/7/2009, with respect to the rejections of claims 1-16 under 35 U.S.C.103 (a) have been fully considered and are persuasive. The rejection of claim 1-16 has been withdrawn.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-2, 5-13 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. The Federal Circuit¹, relying upon Supreme Court precedent², has indicated that a statutory "process" under 35 U.S.C. 101 must (1) be tied to a particular machine or apparatus, or (2) transform a particular article to a different state or thing. This is referred to as the "machine or transformation test", whereby the recitation of a particular machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility (See *Benson*, 409 U.S. at 71-72), and the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity (See *Flook*, 437 U.S. at 590"). While the instant claim(s) recite a series of steps or acts to be

¹ *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

² *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

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performed, the claim(s) neither transform an article nor are positively tied to a particular machine that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

NOTE: Regarding the rejection of claims 1-13, please see the Memorandum dated May 15, 2008, "Clarification of Processes under 35 USC § 101" which may be viewed at the following web address:

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/section101_05_15_2008.pdf

Claims 14 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim(s) 14 define a "data carrier" with descriptive material. While "functional descriptive material" may be claimed as a statutory product (i.e., a "manufacture") when embodied on a tangible computer readable medium, a data carrier embodying that same functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "data carrier" is a form of energy, in the absence of any physical structure or tangible material.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly

connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 14 teaches "computer software on a computer readable medium". The computer readable medium is not disclosed In the specification .The specification teaches the computer terminal includes a CPU , memory, hard disc drive and I/o device, which facilitates interconnection of the computer with PET scanner. But there is no teaching that the computer software is embodied on a computer readable medium rather it is stored in a memory. Appropriate correction is required.

5. NOTE: Examiner did not find any relevant prior art to reject claims 1-2, 5-13, but there is a rejection under 35 USC 101 for these claims.

6. Claim 16 is allowed.

The following is an examiner statement reasons for allowance. Claim 16 is allowed over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found nor motivation to combine any of said prior art which teaches an altering quantities step comprises calculating estimates of first detector data based on second, different, detector data, characterized in that said altering quantities step comprises either: selecting whether to scale an original detected quantity of said first detector data upwards or to replace the

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original detected quantity of said first detector data with a said calculated estimate; or altering the original detected quantity of said first detector data so that the altered quantity takes into account both the original detected quantity and a said calculated estimate. The invention avoids the noise artifact due to the rescaling LORs having very low readings thus providing an improved method of motion correction in tomographic data processing.

Bloomfield et al (The design and implementation of a motion correction scheme for neurological PET) fails to specifically address the invention as claimed.

Lee K.J and Barber D.C. (Use of forward projection to correct patient motion during SPECT imaging) fails to specifically address the invention as claimed.

QI J. and Huesman R.H. (Correction of motion in PET using event based rebinning method: PITFALL and Solution) fails to specifically address the invention as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nancy Bitar/

Examiner, Art Unit 2624

/Vikkram Bali/

Supervisory Patent Examiner, Art Unit 2624